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Meeting Future Army Reconnaissance and Security Requirements

by

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This paper explores how the Army of 2020 should organize and equip itself to execute reconnaissance and security (R&S) operations against hybrid threats. It begins with an historical review of the requirement for a dedicated reconnaissance and security capability, transitions to a description of the hybrid threat, future enemy capabilities, and how the enemy will fight. The paper then defines the gaps in our ability to conduct R&S operations against a hybrid threat. It concludes that the U.S. Army lacks properly organized, equipped and dedicated organizations to meet R&S requirements in the future. In conclusion the essay recommends the Army prioritize assets to fix its R&S gaps. It further recommends the Army focus its effort and resources on the Army's building block for combat operations, the Brigade Combat Team (BCT), by reorganizing, appropriate manning and equipping the Reconnaissance, Surveillance and Target Acquisition Squadrons within the BCT.

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This paper explores how the Army of 2020 should organize and equip itself to execute reconnaissance and security (R&S) operations against hybrid threats. It begins with an historical review of the requirement for a dedicated reconnaissance and security capability, transitions to a description of the hybrid threat, future enemy capabilities, and how the enemy will fight. The paper then defines the gaps in our ability to conduct R&S operations against a hybrid threat. It concludes that the U.S. Army lacks properly organized, equipped and dedicated organizations to meet R&S requirements in the future. In conclusion the essay recommends the Army prioritize assets to fix its R&S gaps. It further recommends the Army focus its effort and resources on the Army's building block for combat operations, the Brigade Combat Team (BCT), by reorganizing, appropriate manning and equipping the Reconnaissance, Surveillance and Target Acquisition Squadrons within the BCT.

Meeting Future Army Reconnaissance and Security Requirements

This paper will explore how the Army of 2020 should organize and equip itself to execute reconnaissance and security (R&S) operations against hybrid threats. The Army has identified a range of solutions to known and perceived gaps in this mission area. The Maneuver Center of Excellence (MCOE) is currently studying this shortfall and is developing potential solutions. In the 2012 Army Capstone Concept Required Capability (ACC), the Army of the future will require an appropriate task organization that can fight for and evaluate information that allows the commander to seize the initiative and act at a time and place of his choosing.[1] The Capstone Concept for Joint Operations (CCJO) sees U.S. forces fighting increasingly capable enemies in an uncertain, complex, ambiguous and changing environment. Intelligence, surveillance and reconnaissance (ISR), tailored with new ways of fighting and partnering, will achieve higher levels of military effectiveness against these future threats.[2] Even with advanced technology, war is and always will be a human endeavor where the man on the ground makes the difference. As the Army explores solutions to shortfalls in reconnaissance and security operations, it makes sense to start at the Brigade level; Brigades are the primary building blocks for the Army, now and into the future.

This paper first looks at the enduring requirement for dedicated R&S capabilities and where the lack of focus on reconnaissance made the difference in battle or had strategic implications. These historic examples include the battle of Gettysburg, where General Lee's misuse of his cavalry and General Meade's doctrinal use of his cavalry had strategic implications for both sides. Additional historical examples include the Vietnam War and the conflict between Israel and Hezbollah in 2006.

Defining the hybrid threat is critical in this process. The Army needs to know how our future enemy will fight, what intelligence the enemy will need and what our enemy needs to keep from U.S. forces. Studying China, Iran and Hezbollah as examples will help in this process, helping to define the possible different levels of offense, defense and stability operations the U.S. will face now and into the future.

The Army has identified gaps with current ISR and security capabilities. If Brigades are the primary building blocks of the U.S. Army, is there a gap or problem with the current capabilities of Reconnaissance, Surveillance and Target Acquisition Squadrons (RSTA) and is this gap significant enough that this problem must be addressed?

Upon defining the current gaps in the RSTA capabilities, this paper will look at possible solutions to meet the R&S shortfalls. Will technology alone address the shortfalls, and/or should the current organizations remain unchanged? Due to historical requirements for dedicated R&S capabilities, the challenges of addressing hybrid threats and the fiscal reality facing the Army, this paper concludes that the Army will need to make the difficult strategic choice to focus on fixing the documented shortfalls in the BCT RSTA organizations.

History

Throughout military history there has always been an enduring requirement for a dedicated R&S capability. To make proper battlefield decisions the commander must accomplish three tasks: know yourself, know the enemy and know the terrain. If the commander fails at any one of the three tasks, their decisions are just guesses. As in the past, R&S can make the difference for both tactical and operational commanders.

There is no better venue to study the effects of proper and improper use of R&S than the battle of Gettysburg. General Lee's cavalry commander General Jeb Stuart recommended to Lee that he should take his cavalry to the east and cross the Potomac River, moving closer to Washington D.C. Lee approved Stuart's plan. However, letting Stuart move on his own prevented Lee from gaining the intelligence he required.[3] Stuart conducted attacks and gathered supplies as opposed to conducting his reconnaissance mission. The failure in reconnaissance caused an intelligence gap for Lee and prevented synchronization of his forces. Had Stuart informed Lee that he had contact with General Hancock's Corps, Lee could have avoided battle at Gettysburg, and with Stuart in the lead, marched to Washington D.C.[4]

Unlike Lee, General Meade used his cavalry effectively. MG John Buford screened the western flank of the Union Army, tracked Lee's main force and MG Gregg screened the right and rear of the Army and tracked the movements of Stuart's cavalry.[5] This allowed Meade to track the movements of the enemy, secure his flanks and gain critical intelligence about the terrain. Buford gained contact with Hill's Corps and sent critical reports on enemy and terrain back to Meade.[6] Buford's actions bought time for the Union to get forces in place and defend against the initial day's assaults. Proper use of R&S was a critical factor in the Union's victory at Gettysburg.[7]

Vietnam was one of America's first wars against an enemy with hybrid threat characteristics. This war was fought amongst the people, against regular and irregular forces, in complex terrain. Vietnam was also the first time new technologies played a major role in ISR. Major advances in optics and electronic sensors made aerial reconnaissance important assets in gathering intelligence.[8] New technology in aerial

reconnaissance was primarily used to conduct long range air strikes.[9] Initially, most Army commanders did not understand the capabilities or importance of these assets.[10]

These new technologies in aerial reconnaissance did not come without their own problems and limitations. Maintenance issues, weather and terrain meant that there were gaps in the intelligence that prevented the decisions required to act on the provided intelligence.[11] With these limitations, ground reconnaissance could not be overlooked. Ground reconnaissance provided information on all aspects in the area of operation, confirming or denying enemy locations, or determining where the enemy did not have influence.[12]

During 1965-1969, ground reconnaissance units executed *Operations Daniel Boone 1 and 2*. *Daniel Boone 1* was a combination of ground and aerial reconnaissance into Cambodia.[13] The reconnaissance teams uncovered multiple phone lines, trails and road networks that were camouflaged from the air.[14] *Daniel Boone 2* included a large number of ground reconnaissance units and general purpose forces (GPF) partnered with the Army of Vietnam (ARVN).[15] This combination of aerial reconnaissance and ground reconnaissance produced enough intelligence on supply depots to inspire an attack into Cambodia with mounted and dismounted GPF forces. This operation netted 13,677 enemy killed or captured and 74 enemy battalion's worth of weapons. In addition to the combat supplies, the U.S. captured enough rice to feed all enemy forces in South Vietnam for four months.[16] According to a captured NVA officer, *Operation Daniel Boone* prevented two planned major offenses in 1970.[17]

In more recent history, the 2006 Israeli-Hezbollah War and the lessons learned by the Israeli Defense Forces (IDF) show a requirement for use of R&S forces. The IDF

relied heavily on Unmanned Aerial Vehicles (UAV). This reliance failed the Israelis at the battle of Wadi Salouqi.[18] The IDF was moving down Wadi Salouqi to seize the town of Ghandourieh. Hezbollah scouts identified that the IDF were going to attack through the wadi and prepared defensive positions. The IDF had UAVs flying forward but they did not pick up Hezbollah anti-tank teams defending the wadi. Hezbollah used their wire-guided AT systems against tanks and IDF infantry. This single battle resulted in ten percent of all IDF casualties during the war.[19] The IDF failed to properly use, organize and equip their ground reconnaissance elements to gain and maintain contact with the enemy. If the Israelis had conducted proper ground reconnaissance it would have allowed them to conduct fire and maneuver to defeat Hezbollah during this battle. Relying solely on technology based ISR against a hybrid threat will cause losses in the future; this battle demonstrates the sustained requirement to conduct ground reconnaissance and security with a properly organized and equipped force.

The Hybrid Threat

The Training and Doctrine Command (TRADOC) G2 and both the Joint and Army Capstone Concepts assess that the U.S. will face enemies with a wide range of sophistication, capabilities and goals beyond 2020. The range of threats could be criminal organizations, terrorists, states and non-state actors, insurgents, transnational groups, proxies and paramilitaries. These threats are increasing in numbers and capabilities; they may operate as regular, irregular, or hybrid threats that will challenge conventional and special operations forces.[20] Traditional armies in countries like China, Russia, India and Iran are investing in more effective conventional capabilities including armor, air defense and robotics. These states also have a military training and military sales programs that enable smaller countries to get technologies they would normally

not have. Future enemies will constantly study U.S. forces and seek to exploit perceived weaknesses; constant reconnaissance and surveillance will be required to avoid surprises and maintain the ability to conduct operations. The Army must be capable of decisive action against a constantly changing and adapting enemy.[21]

Future adversaries would initially defend air and sea ports of debarkation.[22] As U.S. forces gain a foothold, the regular forces would disperse. Even large countries that would become enemies of the U.S. would not use massed formations and linear operations.[23] They would disperse their forces in areas which limit the ability of U.S. forces to apply our full firepower and technological advantage. The enemy would attempt to retain the capability to mass in order to conduct a decisive combat engagement. The enemy would use complex terrain, weather conditions and the civilian population to limit the ISR technological capabilities and fire power of U.S. forces. Additionally, the enemy will attempt to limit our technological ISR systems by overwhelming the system with information. Knowing U.S. capabilities, the enemy will always seek to find a low tech way to limit our technological advantage.[24]

Iran is a potential enemy the U.S. might face in the future. Iran would present the U.S. with a highly adaptive threat, using both technological and low tech-means to achieve its goal. Iran's forces will organize with regular, irregular, criminal elements and terrorists.[25] Ground forces would initially face a combination of both regular forces and guerillas, conducting conventional war with its regular forces while disrupting U.S. lines of communication (LOC) with irregular forces and terrorist cells. Regular and irregular forces would conduct reconnaissance to identify U.S unit locations and maneuver plans in order to counter U.S. forces movement to contact. Regular forces would disperse

and use complex terrain to act decisively at a time of their choosing and allow the irregular forces to operate in the rear area of U.S. forces. Knowing that regular forces will have a limited duration in this war, the Iranians would commit the regular force in order to continue preparations for follow on insurgency. As the conflict continued, Iran's regular forces would transition to irregular guerilla forces and conduct an insurgency living in and amongst the people. The Iranian soldiers will use insurgent tactics, techniques and procedures (TTPs) along with a combination of conventional TTPs. The insurgent forces will work to separate the people from the new emerging Iranian government and U.S. forces. Enemy reconnaissance efforts will be focused on troop movements, LOCs, the civilian populace and Iranian government officials. This fight will continue on until the insurgency is defeated or the political situation calls for a redeployment of U.S. forces.

For the purpose of this paper, a hybrid threat is a diverse combination of regular forces, irregular forces, terrorist and criminals. The enemy will be able to employ advanced technology and regular forces with modern weapons; however, it is difficult to determine the exact threat, it is possible to identify characteristics.[26] This definition contains key elements from the CCJO, ACC and the TRADOC G2 documents. In addition, there are those that believe the U.S. will only fight insurgencies in the future. The future operational environment may also require the Army to secure multiple entry points into an area of operations and the lines of communications that connect those points. The Army may have to seize and secure key facilities and terrain from a determined enemy to set conditions for future sustained operations. The operational

environment may require significant decentralized intelligence and security operations to defeat the enemy.[27]

Defining the Problem

The U.S. Army of 2020 requires dedicated R&S forces with sufficient manpower, mobility, firepower and protection to close with and defeat the enemy, fight for information and conduct effective reconnaissance and security operations.[28] Serving U.S. Army Corps and Division commanders participated in an R&S Brigade Workshop from 3-4 October 2012 at Fort Benning Georgia that concluded there is a lack of a dedicated, organized and trained reconnaissance, surveillance and security forces. They also determined that neither the Battlefield Surveillance Brigade (BfSB) nor its projected force design could fill that void. The Commanders agreed that it was essential to have a formation that could: obtain information by visual observation and develop the situation through action in close contact, conduct combined arms, operate as an air ground force capable of both fighting for information and evaluating that information, provide early warning and identify opportunities to deploy main efforts, integrate joint capabilities, operate effectively in a multinational environment incorporating host nation forces into R&S missions.[29]

As a result, R&S units require the ability to determine hostile intent, assess disposition and activities, fight for information, survive initial contact, destroy inferior forces and maintain contact and or fix enemy forces to enable the commander to deploy his main body. In the past reconnaissance organizations and doctrine tended to either favor an aggressive approach where a unit has to fight for information, or a passive approach that favors stealth and undetected observation, in the future both will have their place depending on the situation.[30]

The current structure of a Heavy Brigade Combat Team (HBCT) RSTA includes 3 M2 and HMMWV mounted troops, with two platoons each to conduct R&S. This task organization has adequate firepower, protection and mobility. However, the HBCT RSTA lacks a third platoon in each troop and the dismounted manpower required for stealthier missions and operating in an urban environment. The Infantry Brigade Combat Team (IBCT) RSTA includes three HMMWV mounted troops, with three platoons per troop and two platoons in the dismounted troop. Compared to the HBCT RSTA, the light RSTA has an increased capability to conduct stealthy missions, but has a significant lack of firepower and is still hindered by dismounted manpower shortages. The Stryker Brigade Combat Team (SBCT) RSTA has three Stryker mounted troops with two platoons each. This organization has adequate firepower and mobility but significantly lacks in overall combat power due to the number of platoons, manpower and vehicle strength. In Iraq and Afghanistan, RSTAs were primarily employed as mini infantry battalions, conducting counterinsurgency (COIN) and serving as “land owners”. Current reconnaissance and security doctrine and force structure have been somewhat adequate in meeting COIN requirements. However, the RSTA task organization will be insufficient in an environment that contains conventional and or hybrid threats.[31]

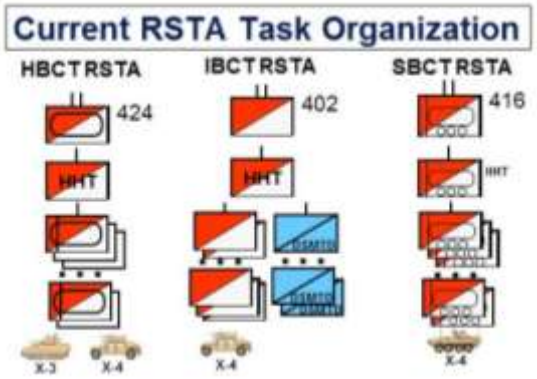

Figure 1. Current RSTA Task Organization

The current COIN environment highlights the doctrinal capability shortfalls in HBCT, IBCT, SBCT and BfSB RSTAs. Multiple Squadron Commanders highlighted capability shortfalls in After Action Review's (AARs) conducted by TRADOC after deployments to Iraq and Afghanistan. These RSTA commanders highlighted a significant shortage in dismounts that prevented them from securing vehicles, improvised explosive device explosion sights and severely limited their ability to operate in urban terrain.[32] Additionally, the shortage of dismounts limited the RSTA Squadrons' ability to conduct stealthy reconnaissance. Due to the overall shortfall in combat power, both the number of Soldiers and platoons, RSTA Squadrons found it difficult to conduct both reconnaissance missions and combat patrols.[33] One Stryker RSTA conducted a reconnaissance mission to the north of Baghdad; limited personnel and a shortage in combat power, coupled with a very large operational environment (OE) prevented the unit from gathering all the required intelligence. With the Army getting smaller (less Brigades) the size of OEs, length and depth of a screen line, or size of a zone, coupled with complex terrain, will require a large RSTA Squadron. Add in the Hybrid threat- fighting both regular and irregular forces- and it is clear the RSTA Squadrons do not have enough combat power.

Vehicle platforms were another concern of the commanders. The commanders agreed that there could not be a single platform. They viewed their requirements to be combination of stealth (HMMWV and dismounted), protection (M2 and or Stryker), firepower (dismount machine guns, M2s, HMMWVs and Strykers) and the ability to maneuver both in open terrain and urban environment. With these issues coming from a COIN environment fighting only an insurgency, there will be a corresponding

significant shortfall when fighting against a hybrid threat containing both regular and irregular forces.[34]

Commanders required significant enablers to accomplish their reconnaissance missions. A significant shortfall was identified in the Squadron S2 section to process intelligence. To fully execute reconnaissance the addition of a Multifunctional Team (MFT) was required. The MFT consists of both Low Level Voice Intercept (LLVI) SIGINT assets and human intelligence (HUMINT). Having MFTs integrated in the squadron netted significantly better intelligence. In the future hybrid threat environment, where the enemy will use low tech means to communicate, where the battles will be fought in and amongst the people and insurgent forces will ensure there is not a linear battlefield, additional intelligence resources will increase the capability of the RSTA.[35] With the RSTA commanders identifying these shortfalls in a COIN environment, the question remains: Does the current task organization of BCT RSTA Squadrons allow them to accomplish the wide range of missions they will encounter during operations against a Hybrid Threat? Below is a required task matrix from field manual 3-20.96, "Reconnaissance and Cavalry Squadron", based on previously identified shortfalls, it is questionable that the RSTA Squadrons can accomplish all the tasks identified as fully capable in the matrix.[36] Note, the ACR CAV SQDN, the most capable organization in the chart, no longer exists due to previous Army force structure decisions.

The Army Capabilities Integration Center (ARCIC) conducted research on the issues affecting RSTAs; their conclusions provide the most complete account of RSTA shortfalls and gaps. The study focused on three main questions:

1. What are the organizational requirements for the 2017 future BCT RSTA missions and tasks?

2. How do RSTA organizational changes impact force effectiveness?

3. What is the effect of RSTA organizational changes on the future BCT battle command?[37]

Table 1. Reconnaissance and Cavalry Squadron Tasks

Type of Squadron	**ACR CAV SQDN**	**HBCT RECON SQDN**	**SBCT RECON SQDN**	**IBCT RECON SQDN**	**BfSB RECON SQDN**
Reconnaissance Tasks					
Zone Reconnaissance	F	F	F	F	P
Area Reconnaissance	F	F	F	F	F
Route Reconnaissance	F	F	F	F	P
Reconnaissance in Force	F	P	P	P	X
Security Tasks					
Screen	F	F	F	F	P
Guard	F	P	F	P	X
Cover	X	X	X	X	X
Area Security	F	F	F	F	R
Local Security	F	F	F	F	F
Offensive Tasks					
Attack	F	P	P	P	X
Movement to Contact	F	P	P	P	X
Defensive Tasks					
Area Defense	F	P	P	P	X
Mobile Defense	F	P	P	P	X
Retrograde	F	P	P	P	X
F – Fully Capable R – Capable when reinforced P – Capable when enemy capabilities do not jeopardize mission (permissive METT-TC) X – Not Capable					

The team conducted simulations against a hybrid threat. The threat included a mix of militia and regular forces hiding among the population, complex terrain, including both rural and urban environments, adverse weather, and a mix of missions including defensive, offensive and stability missions. The study looked at a combination of both wide area security and combined arms maneuver.[38]

The ARCIC study identified multiple gaps and shortfalls in the RSTA organization. The gaps addressed the main characteristics that all reconnaissance units should have: assured mobility, protection, ability to gather intelligence, sustainment, defense and survivability.[39] Looking at assured mobility, the RSTA lacked the capability to identify minefields; this coupled with different vehicular platforms prevented the RSTA from moving where they were required to go. Lighter vehicles provided less protection, with lighter vehicles came less firepower. Lack of combat power seemed to be the biggest problem that hindered the mission. The study found that less combat power equaled lesser survival rates with the inability to conduct beyond line of sight fires, while significant issues in direct fire capability prevented ground units from prosecuting targets found by aerial platforms. However, when ground reconnaissance elements were coupled with air assets the survival rate and intelligence gathered increased significantly. Finally, lack of dismount capability prevented the RSTA from extending their reach into urban and complex terrain. When the RSTA had the increased dismount capability they were able to execute missions in towns and villages, assess infrastructure and were essential in securing key infrastructure like bridges and choke points; most importantly the Soldiers were able to make contact with civilians while working in close concert with the mounted element. The additional dismounted scouts were repeatedly employed in complex terrain, ensuring a much higher mission success rate.[40]

The entire ARCIC study emphasized the importance of security and gaining intelligence on physical terrain, enemy, infrastructure and human terrain and then identified significant gaps in RSTA capabilities. Combining ARCIC results with AARs

from former RSTA commanders and the author's own experience, lead to the conclusion that there is currently a significant gap in the RSTA's ability to gain the intelligence required for agile maneuver against the hybrid threat.[41] The Army will need to address these gaps and shortfalls to allow it to fight and win against its future agile and adaptive enemy.

Possible Solutions

There are many possible solutions to the reconnaissance and security gaps facing Army forces today and into the future. One possible solution would be to increase the amount and capabilities of technology-based platforms such as aerial reconnaissance, both manned and unmanned, and SIGINT. These systems are very capable and technology is increasing every day, so there is great appeal in the expanded the use of these assets.

Aerial reconnaissance prevents loss of human lives, provides real time imaging, can be manned and unmanned, can operate without the enemy knowing it's there and easily identify targets in open terrain. Aerial platforms - unmanned, fixed wing and rotary wing - are armed and can destroy enemy forces, if used in mass they can fix an enemy force, however this would come at the price of other aerial reconnaissance operations throughout the OE. Aerial reconnaissance is limited in its ability to identify go or no go terrain, find the enemy in dug in battle positions and complex terrain, conduct human terrain collection and is limited by weather. The ARCIC study also found that air only reconnaissance failed to answer the commander's critical information requirements (CCIR) and that the ground reconnaissance elements did better in adverse weather than the aerial did in good weather.[42] An increase in aerial reconnaissance efforts will not be the complete answer against a hybrid threat, but

these platforms do play a significant role when task organized under the control of the RSTA commander.

Another possible solution would be to increase SIGINT, though SIGINT alone could not be the answer and would have to be coupled with aerial assets. SIGINT does not have the capability to provide security, but can give indications on human terrain, enemy intentions and enemy locations in complex terrain. SIGINT cannot fix the enemy or destroy them, nor identify terrain. SIGINT is vulnerable to deception and low tech means of communication. When paired with aerial reconnaissance there is a significant increase in capability. Technology is ever-changing and increasing in capabilities; the hybrid threat will consistently change to minimize our technological advantage. Despite the reality that war is waged with increasingly sophisticated technologies, the conduct of military operations will remain a primarily human endeavor.[43]

Another option could be to remain the status quo with current R&S organizations and capabilities. As the Army faces current and future fiscal restraints, this is an attractive option. However, this option will require the Army to accept a significant amount of risk against a hybrid threat. If the Army is willing to accept these risks it must accept that brigade commanders will be limited in their ability to act decisively on the battlefield, risking mission failure, destruction of equipment and our most valuable asset, the lives of our Soldiers.

The creation of a “Reconnaissance and Security Brigade Combat Team” (R&S BCT) is an option described in “Seizing the Initiative”, this document advocates taking a BCT and re-missioning it to provide R&S to Corps and Division Commanders, in essence, recreating Armored Cavalry Regiments. This option would give the Corps and

Division Commanders flexibility in meeting their reconnaissance and security requirements. The R&S BCT would contain all the organizational requirements to conduct this mission and have all the characteristics to conduct both aggressive and stealthy reconnaissance with significant combat power that could maneuver throughout a Joint Task Force's operational environment.[44] This is an expensive solution that might one day be required, but it does not address the enduring requirement to have a dedicated, properly equipped and manned reconnaissance and security force within every Army BCT.

With the BCT being the basic building block of Army combat power and mission command, the R&S BCT option would not address the requirements at the BCT level. In the hybrid threat model, just as in COIN operations, Corps and Division Commanders will conduct more resource management than maneuver. In a Corps or Division OE, the commander could have one BCT conducting stability operations, second BCT in the defense and another BCT conducting combined arms maneuver against regular forces, while simultaneously building an interim government. With current and developing technology, Corps and Division Commander's CCIR requirements could be met through these technology based platforms. If additional information is required, Corps and Division Commanders could task a BCT to gather specific CCIR and or task organize a BCT's RSTA under their control.

The Army has consistently identified the BCT as the base for its combat operations, both now and in the future. It must resource the BCT commander to act decisively on the battlefield against a hybrid threat. The solution must ensure that the BCT commander can action his forces at a time and place of his choosing to win the

battle. In order to give the BCT commander a full ability to accomplish the mission, he will require a RSTA capable of conducting aggressive and stealthy reconnaissance, possessing appropriate mobility, survivability and combat power. Synthesizing recommendations from "Seizing the Initiative" and the ARCIC study, HBCT, IBCT and Stryker RSTAs must be able to:

- Conduct decentralized combined arms to the platoon level and incorporate joint capabilities
- Execute intelligence collection, analysis and fusion
- Access national intelligence systems
- Integrate aviation support: both manned and unmanned
- Conduct engineer reconnaissance, ensure mobility
- Conduct CBRNE reconnaissance and detection
- Sustain operations across wide areas
- Maintain mission command and communications
- Destroy and or fix a lesser force
- Conduct SIGINT collection[45]
- Gather intelligence on enemy forces, physical terrain and human terrain

ARCIC identified key requirements for RSTAs that provided the best reconnaissance against a hybrid threat. These key elements are additional ground reconnaissance capability (numbers of vehicles, type of vehicles, dismounts that ensure mobility, survivability and the ability to destroy a lesser force and or fix the enemy) and dedicated manned aerial reconnaissance.[46] The best formations were six vehicle

platoons with the appropriate number of dismounts, with dedicated unmanned and manned aerial reconnaissance. This organization enabled the RSTA Squadron to:

- Turn detections collected into targets
- Detect enemy infantry in an ambiguous threat environment
- Acquire additional enemy systems
- Operate in adverse weather conditions
- Understand the area of interest
- Visualize the enemy terrain
- Assess the political, social, infrastructure and physical environment of operational variables
- Provide security to the main body

When the RSTA was given these capabilities with sufficient combat power, the BCT commander was able to use less forces to defeat the enemy, as opposed to the BCT commander with a lesser resourced RSTA.[47]

The U.S. Army will need to make the strategic choice to reorganize and properly man and equip the BCT RSTAs by providing them with improved mobility and survivability capabilities as well as the capability to conduct aggressive and stealthy reconnaissance. The RSTA will need to gather the required intelligence that allows the BCT commander to act decisively against a hybrid threat. Proper manning and equipping will be essential for not only the BCT commander but also for the Division commander to accomplish their missions. With the U.S. Army expected to operate in a larger OE, in complex terrain, against an adaptable enemy, with a smaller and agile force, proper reconnaissance, security and intelligence will make the difference.

The U.S. Army requires a RSTA that meets these requirements and should use a common structure for both the HBCT and IBCT RSTA. This paper recommends a HBCT and IBCT RSTA structure with six troops: two mounted troops with three platoons, one dismounted troop with three platoons, one air troop with two platoons, one headquarters and headquarters troop and one forward support troop. The two mounted troops would consist of one headquarters platoon with three maneuver platoons; each maneuver platoon will consist of eight vehicles, four M2 and four HMMWV, with a full complement of dismounts to fill each platform. The dismounted troop would consist of the same structure as a standard light infantry company but have a complete focus on reconnaissance missions. All ground troops will have an MFT in order to give additional capability with SIGINT and HUMINT. The air troop TO&E would be two platoons of OH-58 D Kiowa Warriors consisting three helicopters each. The headquarters and headquarters troop would consist of the standard medical platoon and staff, a UAV platoon, CBRNE platoon and a security section. Finally, it needs a forward support troop, with the additional resources and the supporting logistics tail that goes along with supporting an organization of this size. This paper further recommends adjustments to the SBCT RSTA structure, adding an additional platoon per troop and adding two additional vehicles and full complement of dismounts to fill each platoon.

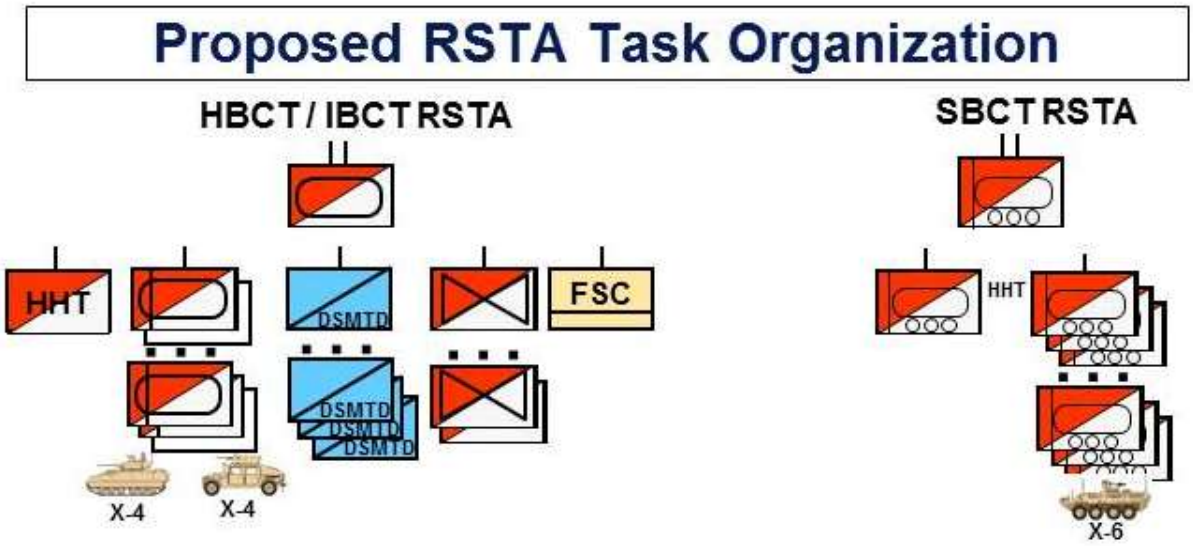

Figure 2

It is one thing to gather intelligence and a completely different challenge to conduct the analysis on that intelligence. The current RSTA staff structure is inadequate to manage the additional assets in the new organization and to analyze the intelligence gathered to provide the BCT commander with the proper picture. The S2 section will require an additional collection manager, one each SIGINT manager and HUMINT manager to assist with employment and train the MFTs. The S3 section will require a Squadron engineer staff section and an A2C2 section to assist the Squadron in providing terrain products and managing the aircraft. Additional S6 personnel will be required to manage the additional communications equipment. The Squadron will need to communicate across the breadth of their extended range and communicate with joint and national assets.

There will be few arguments for adding additional combat power to the SBCT RSTAs; however, there are arguments against having the same structure for both HBCT and IBCT RSTAs. The HBCT advocates might argue for heavier vehicles by

having tanks within the TO&E and the IBCT advocates would argue that the structure is too heavy and would hinder its light infantry capabilities. In response to the HBCT argument, the M2 has tank killing capability with TOW system and the light troop has Javelins. Additionally having tanks would limit the RSTA's endurance and range due to increased fuel requirements. To address the IBCT argument, one response is that in future conflicts there may not be a full requirement for true light infantry. Due to the size of OEs, just as in the current COIN environment, light infantry will likely be motorized in order to provide increased tactical mobility. Finally, the heavier RSTA will give the IBCT commander flexibility against a hybrid threat; the commander will have a highly mobile force with significant combat power for reserve and security operations. To quote a reconnaissance officer in WWII, "Efforts and doctrine directed towards making the Cavalry Squadron exclusively a reconnaissance unit, not participating in combat other than as a necessity of extrication from enemy reaction or in the exceptional case of limited engagement by fire to obtain information desired, is faulty. It is evident that there is no occasion, no opportunity and justification for the maintenance in large commands of such extremely costly, highly trained organization simply for the purpose of executing reconnaissance."[48]

Identifying the solution is the easiest part to fix these reconnaissance and security gaps. With the current U.S. economic situation, the Army is and will be, at least into the near future, under fiscal constraints. How does the Army pay the bill? As stated earlier in the paper, the assumption is that the force cap will remain the same and there will be no additional money to buy equipment. Bottom line, this is a zero sum

game with the manning and equipping having to come from within the current force structure.

How does the Army get the equipment and personnel to fill the RSTAs with the proposed task organization? Possible bill payers include the BfSB RSTAs, the disbanded Brigades, the air cavalry squadrons in the Combat Aviation Brigades (CAB) and the infantry battalions' delta companies.

As the Army looks at reducing the number of Brigades from 44 to 32, the equipment requirements could come from those Brigades. This solution carries little to no risk for the Army and the equipment is already there. This part of the solution will address the majority of the equipment resourcing. Though the reduction in Brigades addresses the equipment issue, it does not address the manpower shortfalls.

The next bill payer for both equipment and personnel would be BfSB RSTAs. The BfSB RSTAs should be disbanded and its equipment and personnel distributed to the IBCT and HBCT RSTAs. The BfSB with its military intelligence battalions has a lot to offer in the gathering of intelligence, but its RSTA is not one of them. The current BfSB RSTA is not heavy enough nor can it truly support itself. If the BfSB RSTA conducts the missions initially intended it would require a BCT type organization to truly support them. The risk would be leaving Division and Corps commanders without organic R&S capability. As discussed earlier in the paper, doing such comes with minimal risk.

The remaining required personnel could be the toughest problem. One potential source is the IBCT infantry battalions and their delta companies. With the Javelin and the increased capability of the BCT RSTA squadrons, requirement for the HMMWV

mounted TOW system may be reduced or even eliminated. There is some risk in this option, leaving the infantry battalions with no dedicated tank destroying capability. The risk is low to medium due to the hybrid threat; additionally if there is a true tank or light armor threat, the new RSTA organization will be able to identify and provide early warning and or reduce the threat before there is a chance of contact. Additionally, task organizing units from an HBCT to light infantry units, based on threat, could further reduce the risk.

The final and probably most contentious bill payer would be the CAB. The air cavalry squadron with each CAB could be disbanded and each of the troops, along with their helicopter mechanics and support personnel, would be re-distributed to each of the BCT RSTAs. This option gives the RSTAs and the BCT Commander the most flexibility, allowing for properly executed reconnaissance security missions. Having a RSTA with task organized reconnaissance helicopters would best serve the BCT and Division commander as well as giving the BCT commander a truly combined arms force structure. This option carries minimal risk; if fighting with three BCTs and a CAB, a Division still has the same number of OH-58s with no overall reduction in its aggregate aerial reconnaissance capability. The aerial capability will no longer be under one squadron command, but under multiple BCTs, thus maximizing use and providing flexibility. With mission command a key component of both the Joint and Army Capstone Concepts, decentralized operations will be norm; a RSTA and BCT commander will require this capability to be successful against a hybrid threat.

Recommendations and Conclusion

This paper recommends the U.S. Army should make the strategic choice to resource a fully equipped, manned and dedicated reconnaissance and security force at

the BCT level. Secondly, the U.S. Army needs to further study other options, such as retaining the status quo and developing alternative organizations, and then war-game these organizations against hybrid threats in order to further develop these options and evaluate their effectiveness in likely scenarios.

Since the beginning of warfare, reconnaissance and security had a critical role in battlefield success. From Gettysburg to the Israeli Hezbollah war, when reconnaissance was conducted properly or improperly, it has corresponding positive or negative consequences, at all levels – tactical, operational and strategic. The hybrid threat of the future will create multiple dilemmas for commanders; they will have to fight regular and irregular forces, terrorists and criminals in a multitude of complex environments. As the Army has seen in both the current COIN conflicts and simulations, there is a significant R&S gap in the conduct of reconnaissance and security operations. The required response will be to adequately man and equip the IBCT and HBCT RSTAs to accomplish the multiple reconnaissance and security tasks that a BCT commander will perform against the hybrid threat. Despite the current national economic situation and fiscal restraints that will be placed on the Army, the Army can equip and man this restructured RSTA with minimal disturbance to the force. Not addressing documented capability gaps brings unacceptable risk.

Endnotes

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[41]Professional military experience from the author. David L. Sanders III. served three tours in Iraq, two with the First Cavalry Division from 2004-2005, 2006-2008 and the third tour with the Third Infantry Division from 2009-2010, commanded an IBCT Reconnaissance Squadron in the 10th Mountain Division from 2010-2012, Carlisle Barracks, PA, December 18, 2012.

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